MR FORM 1 Page 1 of 3 MINING APPLICATION
NO.

Date: May 10, 1977

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF CIL, GAS AND MINING
1588 West North Tample
Salt Lake City, Utan 84116



## NOTICE OF INTENTION TO COMMENCE MINING OPERATIONS (See Rule M of General Rules and Regulations)

2. Address P.O. Box 250, Eureka, Utah 84628 Permanent Temporary  3. Name and title of erson representing Company Robert H. Peterson  4. Address P.O. Box 250, Eureka, Utah 84628 Office Phone 801-433-6854  5. Location of Operation Sec. Appendix A; paragraph A-1 and attached map  County  6. Name of Mine See Appendix A; paragraph A-2  7. Mineral to be mined: Mining Method:  ( ) Coal ( ) Flagstone  ( X) Copper ( ) Gravel  ( ) Manganese ( ) Shale ( ) Tron Ore ( ) Uranium ( ) Phosphate ( ) Gilsonite ( ) Potash ( ) Bituminous Sandstone ( ) Fluorspar ( ) Tungsten ( X) Other (Specify) Lead, Zine, Silver and Gold  8. Have you or any Person, Partnership or Corporation associated with you received an approved Notice of Intention to Commence Mining Operations by the State of Utah for operations other than described herein?  ( ) Yes  ( ) No  If yes, list all approval numbers now under surety:	1.	Name of Applicant or Company Tintic Division, Kennecott Copper Corp.  Corporation (X) Partnership ( ) Individual ( )
3. Name and title of erson representing Company Robert H. Peterson  4. Address P.O. Box 250, Eureka, Utah 84628 Office Phone 801-433-6854  5. Location of Operation See Appendix A: paragraph A-1 and attached map County  6. Name of Mine See Appendix A: paragraph A-2  7. Mineral to be mined: Mining Method: ( ) Coal ( ) Flagstone ( ) Gravel ( ) Gravel ( ) Gravel ( ) Hanganese ( ) Shale ( ) Thon Ore ( ) Uranium ( ) Phosphate ( ) Gilsonite ( ) Potash ( ) Bituminous Sandstone ( ) Fluorspar ( ) Tungsten ( ) Tungsten ( ) Other (Specify) Lead, Zine, Silver and Gold  8. Have you or any Person, Partnership or Comparation associated with you received an approved Notice of Intention to Commence Mining Operations by the State of Utah for operations other than described herein? ( ) Yes ( ) No  19. Owner/Owners of record of the surface area within the land to be affected:  See Appendix A: paragraph A-4 Address  Address  Address		individual ( )
4. Address P.O. Box 250, Eureka, Utah 84628 Office Phone 801-433-6854  5. Location of Operation See Appendix A: paragraph A-1 and attached map  County  6. Name of Mine See Appendix A: paragraph A-2  7. Mineral to be mined: Mining Method: ( ) Coal ( ) Flagstone ( X) Copper ( ) Gravel ( ) Manganese ( ) Shale ( ) Tron Ore ( ) Uranium ( ) Phosphate ( ) Gilscnite ( ) Potash ( ) Bitumincus Sandstone ( ) Pluorspar ( ) Tungsten ( X) Other (Specify) Lead, Zine, Silver and Gold  8. Have you or any Person, Partnership or Corporation described with you received an approved Notice of Intention to Commence Mining Operations by the State of Utah for operations other than described herein? ( ) Yes ( ) No  19. Owner/Owners of record of the surface area within the land to be affected:  See Appendix A: paragraph A-4 Address  Address	2.	Address P.O. Box 250, Eureka, Utah 84628 Permanent Temporary
5. Location of Operation    Sec Appendix A; paragraph A-1 and attached map R.	3.	Name and title of erson representing Company Robert H. Peterson
5. Location of Operation    Sec Appendix A; paragraph A-1 and attached map R.	4.	Address P.O. Box 250, Eureka, Utah 84628 Office Phone 801-433-6854
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See Appendix A: paragraph A-4 Address  Address		Have you or any Person, Partnership or Corporation associated with you received an approved Notice of Intention to Commence Mining Operations by the State of Utah for operations other than described herein?  ( ) Yes
See Appendix A: paragraph A-4 Address  Address		
		Address

Same as No. 9 above	Address	
	Address	
	Address	
	Address	
Owner/Owners of record of affected:	f all other minerals withi	n any part of the land
Same as above	Address	
•	Address	
· ·	Address	
	Address	
Have the above owners beer (X ) Yes	n notified in writing?  ( ) No	
Source of Operator's legal to be covered by the Notice Approximate acreage to be	Lease and ownership or	cr cperations on land f patented and unpatented mi
Mining operation area (inc		and disposal area):
	900	acres +
Access Road or Haulageway:	100	acres +
Drainage System:	1,000	acres =
Total Acres:		acres
Give the names and post of Officer, Partner, (or Perso Name	fice addresses of every pron performing a similar full Title	rincipal Executive, unction) of Applicant: Address
A, H. H. Kremer	President Metal Mining Division	Kennecott Copper Corporat 161 East 42nd Street
7.		New York, New York 10017
Robert H. Peterson	General Manager	P.O. Box 250
	Tintic Division	Eureka, Utah 84628

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If yes, explain:

STATE OF
COUNTY OFJuab
I, Robert H. Peterson, having been duly sworn
depose and attest that all of the representations contained in the foregoing
application are true to the best of my knowledge; that I am authorized to
complete and file this application on behalf of the applicant and this
application has been executed as required by law.  Signed: Pobert N. Poberson
Taken, subscribed and sworn to before me the undersigned authority
in my said county, this 19 day of Mary Public: Jackrick a blum  Notary Public: Jackrick a blum  My Commission Expires: Augusty 7, 1979

MR FORM 2 Page 1 of 3

MININ NO.	PPLIC	N
Date:	May 10.	1977

STATE OF UTAH
DEPARIMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
1588 West North Temple
Salt Lake City, Utah 84116

MINING AND RECLAMATION PLAN
(Other forms may be used in lieu of MRA 2, provided they contain the same information.)

1.	Name of Applicant or Company	ion
2.	Proposed type of operation Underground Mining	
3.	(a) Prior Land Use(s) Mining and livestock grazing	
•	(b) Current Land Use(s) Mining and livestock grazing	
	(c) Possible or Prospective Future Land Use(s) Mining and livestock	graz
4.	What vegetation exists on the land proposed to be affectedjuniper,	
	pinion pine, and sage	
	(a) Types and Estimated Percent Cover or Density: See Appendix B:	
	paragrpah B-l	<u>,</u> .
5.	What is the range pH of soil before mining?pH.	
	Name of Person or Agency and method of determining pH See Appendix B;	
	paragraph B-1	
6.	Site elevation above sea level Ranges from 5,400' to 7,300'	
7.	In case of coal, oil shale, and bituminous sandstone:	
	Principal seam(s) and thickness(es)	
в.	Estimated duration of mining operations 50	
	Has overburden, waste or rejected materials been classified as acid or alkali producing? ( ) Yes (X) No Does the above material being moved have any other characterisitics affecting revegetation? No	
10.	Will any underground workings or aquifers be encountered? ( ) Yes ( ) Describe See Appendix B; paragraph B-2	) N.
	Is there an active discharge of water from abandoned deep mines on or crossing the land affected? ( ) Yes (x) No Ii Yes, describe the quality of water being discharged.	

- 11. Describe specifically a detailed procedure for:
  - The mining sequence. a.
  - The procedure for constructing and maintaining access roads, to include a typical cross-section and a profile of the proposed road grades.
  - c. The procedure for site preparation including removing trees and brush.
  - d. The method for removing and stockpiling topsoil or disturbed materials,
  - e. The method for the placement or containment of all disturbed materials, to include the method for handling of all acid or alkali-producing and toxic material.
  - A procedure for final stabilization of disturbed materials.

## GRADING AND REGRADING

Specifically describe: See Appendix B; paragraph B-3

- a. Typical cross-section of regrading.
- b. The method of spreading topsoil or upper horizon material on the regraded area and indicate the approximate thickness of the final surfacing material.
- c. What type of soil treatment will be utilized.
- d. The method of drainage control for the final regraded area.
- e. Maximum grading slope.

	TESTING
1.	a. Describe method for testing stability of reclamation fill material.  See Appendix B
	b. Describe method for the testing of soil that is intended to support vegetation.
2.	Describe any soil treatment employed as an aid to revegetation.
3.	Describe surface preparation of areas intended to support vegetation:
	See Appendix B
	REVEGETATION
	Revegetation to be completed by:  ( ) Operator ( ) Soil Conservation District ( ) Agria: Seeding ( ) Conventional or Rangeland Drilling ( ) Other (Specify)
2.	Will Mulch Be Used? Type
	lbs.

3. Revegetation Plan and schedule -

Will affected area	areas as requ	ection be nee	N-5-E-W or wildlife gr ded: Fencing	razing: (X) yes
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protect reseeded	areas as requ	ection be nee	or wildlife gr ded? <u>Fencin</u> g	razîng: (X) yes g will be used to
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	used? (	) Yes ( X)	No Type	
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## MINING AND RECLAMATION PLAN APPENDIX A

- A-1) Mining and concentrating operations are planned in Sections 3, 10, 11, 14, 15, 19, 20, 22, 28, 29 and 30, T. 10 S., R. 2 W., Juab and Utah Counties.
- A-2) The Tintic Division is operating the Burgin, Trixie,
  Mammoth and Water Lily mines. In addition, operations are
  planned at the Ball Park (Section 10), Colorado-Utah
  (Section 20), Zuma (Section 21), Grand Central (Section 19)
  and Iron Blossom (Section 29).
- A-3) The mining operation will be underground and will utilize a combination of methods ranging from room and pillar to shrink stoping. Ground conditions and ore habits require a highly flexible operation not amenable to long range planning.
- A-4) The following are owners of record of surface and minerals of the area to be affected.
  - Chief Consolidated Mining Company, 747 Third Avenue, New York, New York 10017
  - Amax Arizona Inc. 130 South Scott, Tucson, Arizona 85702
  - Eureka Standard Consolidated Mining Company, 130 South Scott, Tucson, Arizona 85702
  - South Standard Mining Company, 1114 Walker Bank Bldg., Salt Lake City, Utah 84111
  - Pinyon Queen Mining Company, 1114 Walker Bank Bldg., Salt Lake City, Utah 84111
  - Central Standard Consolidated Mines Company, %Tracy-Collins Bank and Trust Company, 151 South Main, Salt Lake City, Utah 84101

Mammoth Mining Company, Box 20, Eureka, Utah 84628

Mammoth No. 2 Mining Company, Box 20, Eureka, Utah 84628

Gold Chain Mining Company, Box 20, Eureka, Utah 84628

Opohongo Mining Company, Box 20, Eureka, Utah 84628

Cleveland Mining Company, Box 20, Eureka, Utah 84628

Utah Consolidated Mining Company, Box 20, Eureka, Utah 84628

Kennecott Copper Corporation, 161 East 42nd Street, New York, New York 10017

## APPENDIX B

- B-1) Present mine and mill facilities will be utilized wherever possible. No native vegatation exists at these locations. New surface facilities that will be required are at locations where juniper, pinion pine and sage exists. The types and density vary greatly from individual locations. The pH of the soil varies from strongly acidic in the vicinity of old dumps to moderately basic in other areas.
- B-2)
  All mines except the Mammoth and Grand Central will ultimately be operated below the present water table. Water disposal will follow the present disposal plan approved by and on file with the Utah State Engineer. In the case of the Mammoth and Grand Central mines, water will be discharged into old workings adjacent to the two mines and will not be discharged on the surface.
- B-3) Ore presently available will be mined using existing workings where possible. Exploration and development will continue to provide added ore reserves and extend the known life of the total operation. Development waste rock will be utilized as backfill wherever possible in presently unfilled stopes and in new stopes as opened.

Present access roads will be used when possible. New roads will be planned, constructed and maintained to prevent conditions detrimental to the general area.

Existing dumps are being shipped for processing and will continue as economic conditions warrant. Over 150,000 tons have been removed to date. Upon removal of old dump material and exposure of pre-dump original surfaces, indigenous vegatation or improved types will be seeded using the most efficient method available at the time of reseeding.

All present tailings ponds will be reprocessed as economic conditions warrant. Tailings not workable will ultimately be used as mine backfill. Tailing pond areas will be reclamed using the most efficient methods available at time of reclamation.

B-4) In summary, land reclamation of property controlled by Kennecott in the Tintic District is in progress. Old dumps are shipped wherever possible, open shafts are being fenced and/or covered with approximately 95% completion and roads not required are closed to allow natural vegatation to rehabilitate itself. Each individual area will be reclamed at completion of its mining cycle. Because of the diverse nature of the Tintic operation, each small segment will be treated as a separate entity and will require a totally separate plan for reclamation.

On completion of the total mining cycle, all dumps, roads and surface workings will be stabilized using the most efficient method possible at time of completion.